In the Claims:

1. (Original) A compound of Formula I:

$$\begin{array}{c|c} O & R_2 \\ \hline \\ R & N \\ \hline \\ N & N \\ \hline \\ O & R_2 \\ \hline \\ R_3 \\ N & N \\ R_4 \\ \hline \\ R_5 \\ \end{array}$$

Formula I

or a pharmaceutically acceptable salt thereof, wherein R is substituted or unsubstituted aryl, cycloalkyl, heterocyclic, alkoxy, cycloalkoxy, aryloxy, heteroaryloxy, alkylamino, cycloaklylamino, arylamino,

heteroarylamino; or

R is

$$R_1Z \searrow CX''$$

wherein X' and X" are each independently hydrogen, hydroxy or fluoro, provided when one of X' and X" is fluoro, the other is not hydroxy; or

X' and X" together form an oxo group,

Z is selected from the group consisting of alkyl, nitrogen, oxygen, sulfur and a bond covalently linking R_1 to -CX'X"-

R₁ is selected from the group consisting of hydrogen, substituted or unsubstituted alkyl, alkenyl, aryl, cycloalkyl, cycloalkenyl, heteroaryl, and heterocyclic;

 R_2 is selected from the group consisting of hydrogen, C_1 - C_4 alkyl, alkylalkoxy, alkylthioalkoxy, -COOR_{2a}, and -COR_{2a} wherein R_{2a} is hydrogen, C_{1-4} alkyl, cycloalkyl, or heterocycle;

R₃ is H, substituted or unsubstituted, linear-, branched- or cyclo-alkyl or substituted or unsubustituted phenyl;

R₅ is -Y-R₆, wherein Y is substituted or unsubstituted alkyl, alkenyl, aryl, cycloalkyl, cycloalkenyl, heterocyclic, or a bond; and

R₆ is substituted or unsubstituted aryl, heteroaryl, cycloalkyl, heterocycloalkyl, aryloxide, heteroaryl N-oxide, or arylsulfide;

provided when Y is a bond, then either R_6 is cycloalkyl, or R_2 is alkylalkoxy or alkylthioalkoxy.

- 2. (Original) The compound of Claim 1, wherein $R = -CR_1X'X''$, X' is H or OH, X'' is H, and R_1 is aryl or substituted aryl.
- 3. (Original) The compound of Claim 1, wherein R₃ is H or t-butyl.
- 4. (Original) A compound of Formula II:

$$\begin{array}{c|c} & & & \\ & & & \\ R_1 & & & \\ & & & \\ X' & & \\ & & & \\$$

Formula II

wherein R_1 is aryl, or substituted aryl; X' is H or OH; R_2 is CH₃, R_3 is H, or t-butyl; R_7 is aryl, substituted aryl, or U-Aryl, wherein U is O or CH₂; and R_8 and R_9 are independently H, or alkyl.

5. (Currently Amended) A pharmaceutical formulation comprising the compound according to any one of Claims 1-4 Claim 1 and a pharmaceutically acceptable carrier.

- 6. (Original) A method for inhibiting β -amyloid peptide release or synthesis in a cell comprising administering to said cell a compound according to Claim 1, in an amount effective in inhibiting the cellular release and/or synthesis of β -amyloid peptide.
- 7. (Original) A method for inhibiting γ -secretase activity comprising administering to a host an effective amount of the compound according to Claim 1.
- 8. (Original) A method for treating or preventing a neurological disorder associated with β -amyloid peptide production comprising administering to a host a pharmaceutical formulation comprising a therapeutically effective amount of the compound according to Claim 1.
- 9. (Original) The method according to Claim 8, wherein said neurological disorder is Alzheimer's disease.